Innovative Transportation Solutions

Tangible Result Driver – Mara Campbell, Organizational Results Director



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Annual dollar amount saved by implementing innovative engineering methods

Result Driver: Mara Campbell, Organizational Results Director **Measurement Driver:** Diane Heckemeyer, State Design Engineer

Purpose of the Measure:

This measure tracks the amount of money MoDOT saves by implementing innovative engineering methods.

Measurement and Data Collection:

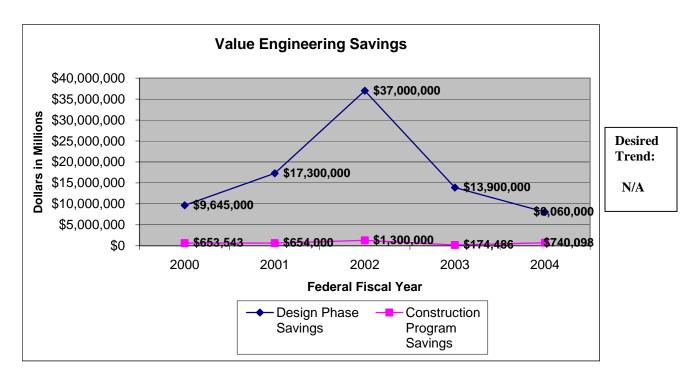
At the project level, the most quantifiable innovations that should result in cost savings are value engineering and design modifications. In addition to savings achieved at the design phase, construction program savings can also be identified when value engineering is used. VE is the systematic application of known recognized techniques by multi-disciplined teams that identify the function of a product or service and identify cost effective alternatives using creative approaches to improve a project's quality and efficiency. Design modifications are variations from standards to fit the individual characteristics of a specific project. In MoDOT's new design environment, "Practical Design" is the umbrella for a more widespread application of this process.

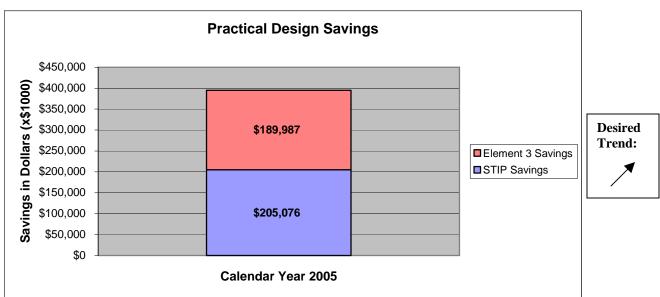
Improvement Status:

Value Engineering savings are reported annually, based on the Federal Fiscal Year, due to reporting requirements to the Federal Highway Administration. The next reporting will be this fall. Since 1988, MoDOT has saved more than \$180 million as a result of VE.

With the advent of Practical Design in late 2004/early 2005, nearly \$400 million in savings has been realized (as reported to the Missouri Highways and Transportation Commission in June). MoDOT's 10 districts examined projects that were already included in the STIP to see if they could reach an aggregate goal of 10 percent savings. The eventual total of \$205,076,000 represented a savings of 13.8 percent. The principles of Practical Design were also applied to the major projects being considered for Element 3 of the Smoother, Safer Sooner program, which utilized funds made available by the November 2004 passage of Amendment 3. The cost of 21 projects was reduced by 11.7 percent – or \$189,987,000 – that enabled the reprogramming of an additional five projects.

Efforts are now underway to provide written Practical Design guidance that will affect change in MoDOT's design culture. Once this guidance appears in a new Project Development Manual, the opportunity for savings on future yet-to-be-designed projects is greater, although it will not be possible to quantify those savings, since there will be no basis for comparison.





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Number of external awards received

Result Driver: Mara Campbell, Organizational Results Director

Measurement Driver: Rebecca Geyer, Senior Performance Analyst/Facilitator

Purpose of the Measure:

This measure tracks the number of external awards received by the department. Many of these awards relate to quality and therefore display the department's dedication to efficiency, innovation and quality throughout the organization.

Measurement and Data Collection:

Each district and division office tracks the awards presented to the department by external organizations, to include all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. This data enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities. Data collection began for this measure on January 1, 2005.

Improvement Status:

Awards received in the fourth quarter of FY05 display a slight increase from the previous quarter. One reason for the increase could be that many award programs present awards in the fall when annual conferences and conventions are held. Since the data only reflects those awards presented in a given quarter, it is conceivable that the first two quarters of a fiscal year would show more awards received than the last two quarters. There has been an increase in nominations for various awards, so it is likely that this measure will continue to show a positive upward trend.

